

Claims Listing:

1. - 6. (Canceled).
7. (Original) A device for body fluid sampling usable with a cartridge housing a plurality of penetrating members, the device comprising:
 - a housing;
 - a penetrating member driver coupled to said housing and for use with said cartridge;
 - a processor for controlling said penetrating member driver to move at least one of said penetrating members at velocities which conform with a selectable velocity profile.
8. (Currently Amended) The device of claim 37 comprising a cartridge housing a plurality of penetrating members and a window allowing a user to see the cartridge while the cartridge is in said housing.
9. (Currently Amended) The device of claim 37 comprising display showing device status.
10. (Currently Amended) The device of claim 37 comprising display showing lancing performance.
11. (Currently Amended) The device of claim 37 comprising display showing lancing parameters.
12. (Currently Amended) The device of claim 37 comprising a single button for actuating said penetrating member driver along an inbound path into tissue and then an outbound path out of the tissue.
13. (Currently Amended) The device of claim 37 wherein said penetrating member driver moves an active one of said penetrating members along a velocity profile that reduces initial pain and residual pain to levels below that of known devices.
14. (Currently Amended) The device of claim 37 wherein said penetrating member driver moves an active one of said penetrating members along a velocity profile that reduces initial pain and residual pain to levels at least 1.5 times less than that of known devices.
15. (Currently Amended) The device of claim 37 wherein said penetrating member driver moves an active one of said penetrating members along a velocity profile that reduces residual pain to levels at least 2 times less than that of known devices.
16. - 31. (Canceled).

32. (Original) A body fluid sampling device for use with a cartridge containing a plurality of penetrating members comprising:

- a penetrating member driver for moving an active one of said penetrating members from a first position outward to penetrate tissue;

- a display that has a screen saver.

33. (Canceled).

34. (Original) A fluid sampling device comprising:

- a housing;

- a cartridge defining a plurality of cavities, said cartridge sized to fit within said housing;

and

- a plurality of penetrating members at least partially contained in said cavities of the cartridge wherein the penetrating members are slidably movable to extend outward from said cartridge to penetrate tissue, said cavities each having a longitudinal opening providing access to an elongate portion of the penetrating member;

- a sterility barrier coupled to said cartridge, said sterility barrier covering a plurality of the longitudinal openings, wherein the sterility barrier covering the lateral openings is configured to be moved so that the elongate portion may be accessed by the gripper without touching the barrier; and

- a slider located on a surface of said housing, said slider movable in a linear direction to rotate said cartridge to bring an unused penetrating member into position for use;

- a tooth gear coupled to said slider to control a distance said slider can travel;

- a follower coupled to said slider;

- a cam surface engaged by said follower to lift said cartridge a desired distance above a first position to allow for rotation of the cartridge without engaging a gripper used to advance the penetrating member.

35. (Currently Amended) The device of claim 434 wherein said cam surface is aligned parallel to said slider.

36. (Currently Amended) The device of claim 434 wherein said linear motion of the cam rotates the cartridge and moves a plunger to break the sterility barrier on the cartridge.

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37. (Currently Amended) The device of claim 134 wherein cam surface comprise a linear strip of material with at least two raised portions and two depressed portions.

38. – 40. (Canceled).

41. (Original) A device comprising:

a housing;

a penetrating member driver;

a cartridge containing a plurality of penetrating members;

a display on said cartridge;

a linear slider on the housing, said slider coupled to a rod;

said rod moving with said slider, said rod having at least one roller

using the linear motion of the slider to rotate the cartridge, punch open a new cavity and load a new penetrating member.

42. (Original) A method of indexing comprising:

moving a linear slider;

said linear slider coupled to a rod;

said rod moving with said slider, said rod having at least one roller

using the linear motion of the slider and linear motion of the rod to push at least one linear slider and to roll a roller along a linear cam surfaces to lift clear a drive assembly, rotate the cartridge, punch open a new cavity and load a new penetrating member.